CLAIMS

What is claimed is:

1. A method for managing a transaction processing system, the method comprising:

defining at least one criterion which is at least a workload characteristic;

defining at least one threshold metric for each of the at least one criterion;

defining at least one trigger action in response to the at least one threshold metric; and

performing the at least one trigger action in response to the at least one threshold metric being met.

2. The method of claim 1, wherein the defining at least one criterion step includes defining at least one of a system level criterion and a transaction level criterion.

3. The method of claim 1, wherein the defining at least one trigger action step includes defining at least one of a system level trigger action and a transaction level trigger action.

4. The method of claim 1, wherein the at least one criterion includes at least one of a processor utilization characteristic, memory utilization characteristic, an input/output characteristic, a storage characteristic, and a network interface characteristic.

5. The method of claim 1, wherein defining at least one threshold metric includes defining at least one of a single and a progressive variable relative to a measurement of an aspect of the transaction processing system.

6. The method of claim 1, further including repeating each of the steps at predefined intervals.

7. The method of claim 1, wherein the at least one trigger action includes at least one of changing the priority of a transaction, terminating a transaction, delaying a transaction, quiescing a transaction, causing another system to stop forwarding transactions, triggering routing of transactions to a different system, and ending a process.

8. The method of claim 1, further comprising:

defining at least one transaction identifier that identifies subsets of transactions; and

defining at least one transaction level threshold metric associated with the at least one transaction identifier.

9. The method of claim 8, wherein the performing step performs the at least one trigger action on a transaction associated with the at least one transaction identifier.

10. The method of claim 9, wherein the performing step performs when the at least one transaction level threshold metric is met.

11. The method of claim 8, further comprising:

defining a system level threshold metric; and

associating the system level threshold metric with the at least one transaction identifier and with the at least one transaction level threshold metric.

12. The method of claim 11, wherein the performing step is only performed when both the system level threshold metric and the transaction level threshold metric are met.

13. The method of claim 8, wherein the defining at least one transaction identifier includes defining a transaction group identifier.

14. The method of claim 1, wherein the defining at least one threshold metric defines a transaction group level metric.

15. The method of claim 1, further comprising the steps of:

loading runtime parameters;

validating the runtime parameters; and

terminating processing if the parameters are deemed unacceptable.

16. The method of claim 1, further comprising:

acquiring a transaction list of currently executing transactions;

collecting details for each of the currently executing transactions;

evaluating transaction details against an interval criterion matrix which defines thresholds associated with the currently executing transactions; and

performing actions when the evaluation step determines a threshold has been met.

17. The method of claim 1, further comprising:

acquiring a list of aggregate transaction groups;

collecting details for each aggregate transaction group;

evaluating each aggregated transaction group details against an interval criterion matrix which defines thresholds associated with each aggregated transaction group; and

performing actions when the evaluation step determines a threshold has been met.

18. The method of claim 1, further comprising collecting data on the status of the transaction processing system, wherein the collecting is performed by one of executable collection logic and interpretable definitions.

19. A method of managing a system, comprising the steps of:

determining current conditions of a workload characteristic;

evaluating the current conditions of the workload characteristic; and

dynamically adjusting system administration criteria based on a threshold metric associated with the current conditions of the workload characteristic.

20. The method of claim 19, wherein the workload characteristic is at least one of a transaction workload characteristic and a system environment workload characteristic.

21. The method of claim 19, wherein the workload characteristic is a transaction processing system characteristic.

22. The method of claim 19, wherein the adjusting includes at least one of changing the priority of a transaction, terminating a transaction, delaying a transaction, quiescing a transaction, causing another system from forwarding transactions, triggering routing of transactions to a different system, and ending a process.

23. The method of claim 19, further comprising the steps of:

defining a system level threshold metric associated with the workload characteristic;

defining at least one transaction identifier that identifies subsets of transactions;

defining at least one transaction level threshold metric associated with the at least one transaction identifier and a transaction workload characteristic; and

associating the system level threshold metric with the at least one transaction identifier and with the at least one transaction level threshold metric.

24. The method of claim 23, wherein the dynamically adjusting step is only performed when both the system level threshold metric and the transaction level threshold metric are met.

25. The method of claim 23, wherein the dynamically adjusting step is only performed when at least one of the system level threshold metric and the transaction level threshold metric is met.

26. A system for managing a transaction processing system, the system comprising:

a means for defining at least one criterion, wherein the at least one criterion is a workload characteristic of the transaction processing system;

a means for defining at least one threshold metric for each of the at least one criterion; and

a means for defining at least one trigger action in response to the at least one threshold metric.

27. The system of claim 26, further comprising:

a means for defining at least one transaction identifier that identifies subsets of transactions;

a means for defining at least one transaction level threshold metric associated with the at least one transaction identifier;

a means for defining a system level threshold metric; and

a means for associating the system level threshold metric with the at least one transaction identifier and with the at least one transaction level threshold metric.

28. The system of claim 26, further comprising:

a means for loading runtime parameters;

a means for validating the runtime parameters; and

a means for terminating processing if the parameters are deemed unacceptable.

29. The system of claim 26, further comprising:

a means for acquiring a transaction list of currently executing transactions;

a means for collecting details for each of the currently executing transactions;

a means for evaluating transaction details against an interval criterion matrix wherein the interval criterion matrix defines thresholds associated with the currently executing transactions; and

a means for performing threshold actions when the evaluation step determines a threshold has been met.

30. The system of claim 26, further comprising a criterion matrix, wherein the criterion matrix comprises:

a system level metric entry that provides a system level threshold for a system level workload characteristic;

a transaction identifier entry that provides an identification for one of a transaction and a transaction group;

a transaction level metric entry that provides a transaction level threshold for transaction type defined by the transaction identifier; and

a facility action entry for identifying logic to be executed if at least one of the system level threshold and the transaction level threshold is met.

31. The system of claim 26, further comprising a means for performing the at least one trigger action in response to the at least one threshold metric being met.

32. A system for managing a transaction processing system, comprising:

a means for determining current conditions of at least a workload characteristic;

a means for evaluating the current conditions of at least the workload characteristic; and

a means for dynamically adjusting system administration criteria based on a threshold metric associated with the current conditions of at least the workload characteristic.

33. The system of claim 32, wherein the at least one workload characteristic is at least one of a transaction workload characteristic and a system environment workload characteristic.

34. The system of claim 32, wherein the at least one workload characteristic is a transaction processing system characteristic.

35. The system of claim 32, wherein the means for dynamically adjusting provides for at least one of changing the priority of a transaction, terminating a transaction, delaying a transaction, quiescing a transaction, causing another system to stop forwarding transactions, triggering routing of transactions to a different system, and ending a process.

36. The system of claim 32, further comprising the steps of:

a means for defining a system level threshold metric associated with the workload characteristic;

a means for defining at least one transaction identifier that identifies subsets of transactions;

a means for defining at least one transaction level threshold metric associated with the at least one transaction identifier and a transaction workload characteristic; and

a means for associating the system level threshold metric with the at least one transaction identifier and with the at least one transaction level threshold metric.

37. The system of claim 36, wherein the means for dynamically adjusting adjusts the system administration criteria when both the system level threshold metric and the transaction level threshold metric are met.

38. The system of claim 36, wherein the means for dynamically adjusting provides for only adjusting when at least one of the system level threshold metric and the transaction level threshold metric is met.

39. A computer program product comprising a computer usable medium having readable program code embodied in the medium, the computer program product includes:

a first computer code to define at least one criterion, wherein the at least one criterion is a workload characteristic of the transaction processing system;

a second computer code to define at least one threshold metric for each of the at least one criterion;

a third computer code to define at least one trigger action in response to the at least one threshold metric; and

a fourth computer code to perform the at least one trigger action in response to the at least one threshold metric being met.